

Crosscutting Concepts

1. **Patterns**-Discovering a configuration of particular values that follow certain rules as to produce a better understanding of the product or relations.

Students will find how the various values of tools used in the telescope begin to follow the same patterns, therefore, giving the students a better understanding of how the telescope tools perform and how they can alter various tools to acquire the desired outcome.

2. **Cause and effect: Mechanism and explanation**-Find the relationship between the reason of actions or events such that one or more are the result of the other or others.

Students will discover through patterns and trials that by altering various telescope configurations that they can explain how a certain action will produce a certain outcome, consequently, defining the relationship of the cause and effect.

3. **Scale, proportion, and quantity**-Amount or measure of all factors employed by the same to create another quality or amount related to the whole.

Students are working with enormous figures with the telescope; hence, by adjusting the figures to a more relatable number, the students will build a better understanding of relationship to the whole.